

## ABSTRACT

The present invention relates to an implantable microfabricated sensor device and system for measuring a physiologic parameter of interest within a patient. The implantable device is micro electromechanical system (MEMS) device and includes a substrate having an integrated inductor and at least one sensor formed thereon. A plurality of conductive paths electrically connect the integrated inductor with the sensor. Cooperatively, the integrated inductor, sensor and conductive paths defining an LC tank resonator.